REMARKS

Applicants express appreciation for the courtesies extended by Examiners Caputa and Holleran during an October 2, 2002 personal interview with Applicants' attorney Arnold Turk. During this interview, the prosecution of parent Application No. 09/147,839 was discussed, especially as it related to the 35 U.S.C. 112, second paragraph, and 35 U.S.C. 112, first paragraph, new matter rejections. In particular, during the interview, the background of Applicants' invention and Applicants' improvement thereover as set forth in the application as filed were discussed. The examiners appeared to favorably view patentability of the claimed subject matter, and indicated clarifying language that even more clearly denotes the subject matter that is already recited in the claims. Moreover, the examiners indicated that the application would be further searched and considered upon filing of a Preliminary Amendment.

Therefore, Applicants are submitting this amendment for further search and consideration.

Applicants are including in this amendment a modification to the specification, at page 13, line 1 made in the parent application.

Moreover, Applicants are submitting herewith a Request for Examiner Approval of Drawing Amendment including changes to the drawings submitted in the parent application. Approval of these drawings amendments are requested in the present applicant, and Applicants will submit formal drawings including these changes upon requirement by the Patent and Trademark Office.

Applicants note that an Information Disclosure Statement was filed November 5, 2001 and a Supplemental Information Disclosure Statement was filed March 4, 2002. Applicants respectfully request that initialed copies of the Forms PTO-1449 submitted therewith be included with the next communication from the Patent and Trademark Office.

Regarding the rejections set forth in the parent application, it appears that many of the rejections have been withdrawn in the Advisory Action mailed June 28, 2001; however, several rejections are apparently still outstanding including 35 U.S.C. 112, first and second paragraph rejections for indefiniteness and new matter.

Regarding the rejection of claims under 35 U.S.C. 112, second paragraph, as being unclear in the recitation of indocyanine green derivative, because the metes and bounds of an indocyanine green derivative cannot be determined, Applicants respectfully once again submit that any indocyanine green derivative may be used in the claimed invention so long as the derivative is derived from indocyanine green and so long as the indocyanine green derivative functions to cause fluorescence when excited. Applicants respectfully submit that the claims, interpreted in light of Applicants' disclosure, reasonably apprise a person of ordinary skill in the art of Applicants' invention.

As previously argued by Applicants, having given examples of what an indocyanine green derivative can be, Applicants once again respectfully submit that the term is not indefinite and that the claims readily apprise the skilled worker what are the metes and bounds of the indocyanine green derivative. Further, Applicants specifically direct the Examiner's attention to the disclosure at page 9, lines 24 to 28, which states, "As herein used, the term 'fluorescent functional group' means a

chemical structure which is a fluorescent partial structure derived from fluorescent labeling compound and binds to an antibody through a reaction between the labeling compound and the antibody. As the labeling compound used for binding a fluorescent function group to an antibody, for example, indocyanine green derivatives can be used." Further, Applicants direct the Examiner's attention to Ito et al., "Development of Fluorescence-Emitting Antibody Labeling Substance by Near-Infrared Ray Excitation", Bioorganic & Medicinal Chemistry Letters, Vol. 5, No. 22, pp 2689-2694 (1995), a document which was originally made of record in a disclosure statement filed August 19, 1999, which teaches examples of indocyanine green derivatives, such as indocyanine green succinimidyl esters.

Regarding the 35 U.S.C. § 112, second paragraph, as being unclear in the recitation of a saccharide derivative, because the metes and bounds of a saccharide derivative cannot be determined, Applicants respectfully submit that the claims, interpreted in light of Applicants' disclosure, reasonably apprise a person of ordinary skill in the art of Applicants' invention. Moreover, the independent claims have been amended to even further clarify that the surfactant is a saccharide derivative having fluorescence intensity enhancing effect. As Applicants stated during the interview, any saccharide derivative may be used in the claimed invention, so long as the derivative is derived from a saccharide, so long as the saccharide derivative functions as a surfactant and so long as the saccharide derivative has fluorescence intensity enhancing effect.

The Examiner is reminded that the "definiteness of the language must be analyzed, not in a vacuum, but always in light of the teachings of the disclosure as it would be interpreted by one of ordinary skill in the art." See MPEP § 2106.

Applicants once again direct the Examiner's attention to the disclosure at page 8, lines 13 to 17, which states, "The surfactant, which is a saccharide derivative, is not particularly limited so long as it does not substantially denature proteins, and has low stimulation against living tissues such as skins and mucosa. For example, octyl glucoside, heptyl glucoside, octyl thioglucoside, heptyl thioglucoside and the like can be used." Further, Applicants once again point to Yamamoto, Japan Journal of Cancer Research, volume 87, pp 488-496, a document of record, for its teaching, inter alia, of a saccharide derivative, e.g., sialyated oligosaccharides.

For the foregoing reasons, Applicants respectfully submit that the indefiniteness rejections are without appropriate basis and should be withdrawn.

Still further, regarding the new matter rejection under 35 U.S.C. 112, first paragraph, Applicants note that the examiners indicated that this ground of rejection was not appropriate, and would not be repeated. In particular, the examiners indicated that the surfactants are not disclosed in the closed manner, and that open language can be utilized when describing the surfactants.

In view of the above, it appears that all remaining issues have been addressed, and that the application should presently be in condition for allowance. However, the examiner is respectfully requested to review the prosecution history of the parent application. If there are any outstanding issues remaining, the examiner is respectfully requested to contact the undersigned by telephone to discuss the same.

The early mailing of the Notices of Allowance and Allowability is respectfully requested.

If the Examiner has any questions or wishes to further discuss this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,
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APPENDIX
MARKED-UP COPY OF AMENDMENT TO SPECIFICATION

Marked-up copy of amended paragraph appearing at page 12, line 29 to page 13, line 3:

In the fluorescent functional group represented by the above formula (II), R^4 and R^5 independently represent hydrogen atom, an alkyl group, an alkoxyl group, or a sulfonate group. Each of R^4 and R^5 may substitute on the phenyl group at any position. As the alkyl group and the alkoxyl group, those mentioned above may be used. The sulfonate group ([$-SO_3^-M$] $\underline{-SO_3^-M^+}$, wherein [M^-] $\underline{M^+}$ represents an alkali metal ion that may be the same or different from M^+ as a counter ion for Q^-) may be, for example, sodium sulfonate group or potassium sulfonate group.

MARKED-UP COPY OF AMENDED CLAIMS 1 AND 13-15

1. (Amended) A composition for immunohistochemical staining which contains a diagnostic marker comprising:

an antibody bound with a fluorescent functional group comprising an indocyanine green derivative which is capable of being excited to cause fluorescence, and

at least one substance which enhances fluorescence intensity of the fluorescent functional group, said substance being selected from glycerophospholipid, fatty acid, or surfactant wherein the surfactant is a saccharide derivative having fluorescence intensity enhancing effect.

13. (Amended) An agent for enhancing fluorescence intensity of a diagnostic marker for immunohistochemical staining, the diagnostic marker comprising an antibody bound with a fluorescent functional group derived from an indocyanine green derivative which is capable of being excited to cause fluorescence, and the agent comprising:

at least one substance which enhances fluorescence intensity of the fluorescent functional group, said substance being selected from glycerophospholipid, fatty acid, or surfactant wherein the surfactant is a saccharide derivative having fluorescence intensity enhancing effect.

14. (Amended) A method for immunohistochemical staining of a tumor cell comprising:

contacting the tumor cell with a composition which contains a diagnostic marker comprising: an antibody bound with a fluorescent functional group comprising an indocyanine green derivative which is capable of being excited to cause fluorescence, and at least one substance which enhances fluorescence intensity of the fluorescent functional group, said substance being selected from

glycerophospholipid, fatty acid, or surfactant wherein the surfactant is a saccharide derivative having fluorescence intensity enhancing effect, and

allowing the composition to bind to the tumor cell, thereby staining the cell with the diagnostic marker.

15. (Amended) A method for immunohistochemical diagnosis of malignant neoplasia of epithelial cells comprising:

contacting the malignant neoplasia of epithelial cells with a composition which contains a diagnostic marker comprising: an antibody bound with a fluorescent functional group comprising an indocyanine green derivative which is capable of being excited to cause fluorescence, and at least one substance which enhances fluorescence intensity of the fluorescent functional group, said substance being selected from glycerophospholipid, fatty acid, or surfactant wherein the surfactant is a saccharide derivative having fluorescence intensity enhancing effect,

allowing the composition to bind to the malignant neoplasia, thereby staining the neoplasia with the diagnostic marker, and

detecting the malignant neoplasia.